

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A neutron ~~Neutron~~ detector comprising scintillating material $\text{Cs}_{(2-z)}\text{Rb}_z\text{LiLn}_{(1-x)}\text{X}_6 : x\text{Ce}^{3+}$, where X is either Br or I, Ln is Y or Gd or Lu or Sc or La, where z is greater or equal to 0 and less or equal to 2, and x is above 0.0005.

Claim 2 (Currently Amended): The neutron ~~Neutron~~ detector according to ~~preceding~~ claim 1, wherein x is above 0.005.

Claim 3 (Currently Amended): The neutron ~~Neutron~~ detector according to ~~one of preceding claims~~ claim 1, wherein x is less than 0.3.

Claim 4 (Currently Amended): The neutron ~~Neutron~~ detector according to ~~one of preceding claims~~ claim 1, wherein x is less than 0.15.

Claim 5 (Currently Amended): The neutron ~~Neutron~~ detector according to ~~one of preceding claims~~ claim 1, wherein it is ~~under in~~ in the form of a ~~monocrystal~~ monocrystal.

Claim 6 (Currently Amended): The neutron ~~Neutron~~ detector according to ~~preceding~~ claim 5, wherein the volume of the ~~monocrystal~~ monocrystal is at least 10 mm^3 .

Claim 7 (Currently Amended): The neutron ~~Neutron~~ detector according to ~~either of claims 1 to 4~~ claim 1, wherein it is ~~under in~~ in the form of a powder.

Claim 8 (Currently Amended): The neutron ~~Neutron~~ detector according to ~~preceding~~ claim 1, wherein it is ~~either~~ packed, ~~[[or]]~~ sintered, or mixed with a binder.

Claim 9 (Currently Amended): The neutron ~~Neutron~~ detector according to ~~one of~~ ~~preceding claims~~ claim 1, wherein its formula is $\text{Cs}_2\text{LiYX}_6:\text{xCe}^{3+}$.

Claim 10 (Currently Amended): The neutron ~~Neutron~~ detector according to ~~one of~~ ~~claims 1 to 8~~ claim 1, wherein its formula is $\text{Rb}_2\text{LiYX}_6:\text{xCe}^{3+}$.

Claim 11 (Currently Amended): ~~Use of~~ A method of neutron detection comprising detecting neutrons using a material of formula $\text{Cs}_{(2-z)}\text{Rb}_z\text{LiLn}_{(1-x)}\text{X}_6:\text{xCe}^{3+}$, where X is either Br or I, Ln is Y or Gd or Lu or Sc or La, where z is greater or equal to 0 and less or equal to 2, and x is above 0.0005, ~~in neutron detection~~.

Claim 12 (Currently Amended): ~~Use according to preceding claim~~ The method according to claim 11, wherein x is above 0.005.

Claim 13 (Currently Amended): ~~Use according to one of preceding use claims~~ The method according to claim 11, wherein x is less than 0.3.

Claim 14 (Currently Amended): ~~Use according to preceding use claim~~ The method according to claim 13, wherein x is less than 0.15.

Claim 15 (Currently Amended): ~~Use according to one of preceding use claims~~ The method according to claim 11, wherein the material is ~~under~~ in the form of a ~~monocrystal~~ monocrystal.

Claim 16 (Currently Amended): ~~Use according to preceding claim~~ The method according to claim 15, wherein the volume of the ~~monocrystal~~ monocrystal is at least 10 mm³.

Claim 17 (Currently Amended): ~~Use according to one of claims 11 to 14~~ The method according to claim 11, wherein ~~[[it]]~~ the material is ~~under~~ in the form of a powder.

Claim 18 (Currently Amended): ~~Use according to preceding claim~~ The method according to claim 17, wherein ~~[[it]]~~ the material is ~~either~~ packed ~~[[or]]~~, sintered, or mixed with a binder.

Claim 19 (Currently Amended): ~~Use according to one of preceding claims~~ The method according to claim 11, wherein ~~[[its]]~~ the material formula is Cs₂LiYX₆:xCe³⁺.

Claim 20 (Currently Amended): ~~Use according to one of claims 11 to 18~~ The method according to claim 11, wherein ~~[[its]]~~ the material formula is Rb₂LiYX₆:xCe³⁺.

Claim 21 (Currently Amended): ~~Material~~ A material of the formula Rb₂LiYX₆:xCe³⁺ where X is either Br or I, Ln is Y or Gd or Lu or Sc or La, and x is above 0.0005.

Claim 22 (Currently Amended): ~~Material~~ A material of the formula $\text{Cs}_{(2-z)}\text{Rb}_z\text{LiLn}_{(1-x)}\text{I}_6\text{:xCe}^{3+}$, where Ln is Y or Gd or Lu or Sc or La, where z is greater or equal to 0 and less or equal to 2, and x is above 0.0005.

Claim 23 (Currently Amended): ~~Material~~ The material according to claim 21 ~~[[or 22]]~~, where x is above 0.005.

Claim 24 (Currently Amended): ~~Material~~ The material according to ~~one of preceding~~ claim 21, wherein x is less than 0.3.

Claim 25 (Currently Amended): ~~Material~~ The material according to ~~preceding~~ claim 24, wherein x is less than 0.15.

Claim 26 (Currently Amended): ~~Material~~ The material according to ~~one of preceding~~ claims of materials claim 21, wherein it is ~~under in~~ in the form of a ~~monocrystal~~ monocrystal.

Claim 27 (Currently Amended): ~~Material~~ The material according to ~~preceding~~ claim 26, wherein the volume of the ~~monocrystal~~ monocrystal is at least 10 mm^3 .

Claim 28 (Currently Amended): ~~Material~~ The material according to ~~one of claims 21 or 22~~ claim 21, wherein it is ~~under in~~ in the form of a powder.

Claim 29 (Currently Amended): ~~Material~~ The material according to ~~preceding~~ claim 28, wherein it is ~~either~~ either packed, ~~[[or]]~~ sintered, or mixed with a binder.